

Scope and Sequence for Equipping Your Students with the Necessary Technology Skills for a Successful Performance Task

Your students are going to create a performance task using technology at the Modification or Redefinition levels of the SAMR model. How can you help your students stay focused on the content and not on the technology while they are creating this project?

In the 5 skills charts below, make a list of all the skills related to the planning, creation, and presentation of that performance task that you expect your students to utilize. (You may add or delete rows to each chart as needed.) The goal is that you will help your students already have the majority of the technology skills necessary to create a successful product prior to the performance task production point of your unit.

Remember to think TPACK.

NOTE: The focus of this list is the technology components; however, elsewhere in your unit, you will also need to consider the human components (critical thinking, public speaking, cooperating with colleagues, rehearsing a dialogue before filming, etc.).

Your Name	Daniel Picard
What is the performance task for your unit?	Creating a 3D package design in CAD to fit the product inside.
What technology will students use to create the performance task (if more than one, differentiate between what is an option and what will be required)	The students will use TinkerCAD and a 3D printer.
Lesson # in which students will create the performance task	4

1. Skills for **planning** the performance task (storyboard, outline, script, research of content, etc.)

Pre-requisite skill student will need to be able to successfully create the performance task	URL to, and description of, an online resource/reference that a student (or parent) can access to learn this skill independently (or refer to as a reminder)	How can you introduce this skill prior to the performance task either in an earlier lesson in this unit or in a prior unit? Briefly describe the learning activity.
n/a		

2. Skills for **capturing** raw components that will be used in the performance task (recording video, capturing audio, searching for photos and graphics, understanding copyright and privacy, etc.)

Pre-requisite skill student will need to be able to successfully create the performance task	URL to, and description of, an online resource/reference that a student (or parent) can access to learn this skill independently (or refer to as a reminder)	How can you introduce this skill prior to the performance task either in an earlier lesson in this unit or in a prior unit? Briefly describe the learning activity.
Calculating Volume of Product	http://www.math.com/tables/geometry/volumes.htm	This will be brought up in class for other lessons. The student will have designed and calculated other solid shapes' volume in a previous design lesson.

3. Skills for **editing/refining** the performance task (edit, transitions, manipulation, supplementing with music, inserting text, etc.),

Pre-requisite skill student will need to be able to successfully create the performance task	URL to, and description of, an online resource/reference that a student (or parent) can access to learn this skill independently (or refer to as a reminder)	How can you introduce this skill prior to the performance task either in an earlier lesson in this unit or in a prior unit? Briefly describe the learning activity.
Working with TinkerCAD like	https://www.3dhubs.com/talk/thread/tinkercad-	Students will work with similar

software	101	software such as Geogebra and Google Sketchup in previous lessons to gain familiarity to it.

4. Skills for **converting/exporting** a project file of the performance task (rendering video, exporting MP3 file, making an html version, etc.)

Pre-requisite skill student will need to be able to successfully create the performance task	URL to, and description of, an online resource/reference that a student (or parent) can access to learn this skill independently (or refer to as a reminder)	How can you introduce this skill prior to the performance task either in an earlier lesson in this unit or in a prior unit? Briefly describe the learning activity.

5. Skills for **making the performance task ready for the presentation** (uploading a video to youtube, setting a wiki's privacy to protected or public, sharing a Google Doc/Site/Survey/Presentation, using the presenter's tools in PowerPoint, etc.)

Pre-requisite skill student will need to be able to successfully create the performance task	URL to, and description of, an online resource/reference that a student (or parent) can access to learn this skill independently (or refer to as a reminder)	How can you introduce this skill prior to the performance task either in an earlier lesson in this unit or in a prior unit? Briefly describe the learning activity.
Working with a 3D printer	https://3dprintersupport.dremel.com/hc/en-us/articles/201215699-3D20-How-To-Videos	This will be taught through the example of my product. I will show students how to use the 3D printer to print their designs.